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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Rolf Brisberger

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7590

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EXAMINER

TRAN, BINH X

ART UNIT

PAPER NUMBER

1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/536,872	Applicant(s) BRISBERGER ET AL.	
	Examiner Binh X. Tran	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03-06-2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05-27-2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group II (claims 7-12) in the reply filed on 03-06-2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 1-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 03-06-2009.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The examiner is unable to find the measuring device 7" in the figure (Note: The figure shows the measuring device 7 and 7', but it does not show measuring device 7"). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 1-2 of claim 7, "coating a metal strand (1), especially a steel strip" is indefinite. It is unclear from the claim whether a steel strip is a require limitation or not.

Claim 7 recites the limitation "the coating metal" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests replacing "the coating metal" to --the molten coating metal-- in order to provide proper antecedent basis.

Claim 8 recites the limitation "the measure device" (i.e. singular) in line 2. There is insufficient antecedent basis for this limitation in the claim. It is noted that in claim 7, applicants recite "measuring devices" (i.e. plural).

Claim 9 recites the limitation "the measure device" (i.e. singular) in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. It is noted that in claim 7, applicants recite "measuring devices" (i.e. plural).

Claim 10 recites the limitation "the measure device" (i.e. singular) in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. It is noted that in claim 7, applicants recite "measuring devices" (i.e. plural).

Claim 11 recites the limitation "the measure device" (i.e. singular) in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. It is noted that in claim 7, applicants recite "measuring devices" (i.e. plural).

Claims 7-12 are indefinite because they depend on indefinite claim 7.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frommann et al. (US 5,665,437) in view of Den et al. (JP 10-046310 A).

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Respect to claim 7, Frommann discloses a device for hot dip a metal strand (S), in which metal strand (S) is passed vertically through a coating tank (B) that contains the molten coating metal (Z), and through guide channel (i.e. passage duct 5) upstream of the coating tank (B), with at least two inductors (1) installed on both sides of the metal strand (S) in the area of the guide channel (5) for generating an electromagnetic field in order to keep the molten coating metal (Z) in the coating tank (B), and with at least two supplemental coils (2, 3, and/or 4) installed on both sides of the metal strand (S) for generating electromagnetic field superposed on the electromagnetic field of the inductors (1) in order to stabilize the metal strand; wherein the supplemental coils (2, 3 and/or 4) are installed within the extent of the inductors (1), as view in the direction of the conveyance of the metal strain.

Frommann fails to disclose measuring devices for measuring the positions of the metal strand and induced current in the inductors (1) and the induced current in the supplemental coils; and automatic control device that are suitable for controlling the induced current in the supplemental coils as a function of the measured parameter in order to keep the metal strand in a central position.

Den teaches to use measuring devices (13, 11a, 11b) for measuring the position of the metal strand using the sensor (13) and measuring devices (11a, 11b) for measuring the current of the coils (10a, 10b), and an automatic control device (control circuit 12) for controlled the induced current in the coils as a function of the measured parameters (See paragraph abstract. 0007-0011). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify Frommann in view of

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Den by using measuring devices and a control device to control the current of the coils because it helps to hold the metal strip at the reference position to provide excellent high dip process.

9. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frommann (US 5,665,437) and Den (JP 10-046310 A) as applied to claim 7 above, and further in view of Rydholm et al. (WO 02/14572 A1).

Respect to claim 8, Frommann and Den fails to disclose the measuring device for determined the position of the metal strain is an inductive pickup. However, Den clearly teaches to use the position sensor. Rydholm teaches to use position sensor (21, 22) which is an inductive pickup by sensing the current of the winding element (i.e. coil) (page 8-10). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify Frommann and Den in view of Rydholm by using an inductive pickup to measure the position of the metal strand because equivalent and substitution of one for the other would produce an expected result.

Respect to claim 9, Rydholm teaches the positions sensor (21, 22) is installed within the extent of the inductors as viewed in the direction of the conveyance of the metal strains (See Fig 3). Respect to claims 10-11, Rydholm teaches the position sensors (21, 22) is installed outside of the extent of the inductors or supplemental coils as viewed in the direction of the conveyance of the metal strains (Fig 2). Respect to claim 12, Rydholm teaches to install position sensor (12, 22) in various places (Fig 2-3).

Conclusion

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh X. Tran whose telephone number is (571)272-1469. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Binh X Tran
Primary Examiner
Art Unit 1792

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